

REMARKS

Initially, Applicant notes that the remarks and amendments made by this paper are consistent with the proposals presented during the telephone call of July 10, 2007.

By this paper, claims 1-2, 4-5, 7-17, 19-20, and 22-27 have been amended, claims 28-31 have been added, and no claims have been canceled, such that claims 1-31 now remain pending.¹ Of the pending claims, claims 1, 12, 14, 16, and 27 are the only independent claims at issue.

The Office Action mailed May 7, 2007 considered and rejected claims 1-27. Claims 1, 3, 8-11, 16, 18, and 23-26 were rejected under 35 U.S.C. §102(b) as being anticipated by Tsuchiya, U.S. Patent 5,353,283, hereinafter Tsuchiya. Claims 2, 6, 7, 17, 21, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tsuchiya in view of Burbeck et al., U.S. Patent 7,181,536, hereinafter Burbeck. Claims 4, 12-15, 19, and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tsuchiya in view of Waclawsky, U.S. Patent 5,493,689. Claims 5 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tsuchiya in view of Burbeck and further in view of Owen et al., U.S. Patent 6,950,438, hereinafter Owen.² Additionally, claim 2 was rejected under 35 U.S.C. §112, second paragraph as being indefinite due to the use of the acronym SOAP.

As a preliminary matter, Applicant notes the specification has been amended to comply with a number of objections indicated by the Examiner in the office action. Additionally, claim 2 has been amended to spell out the SOAP acronym, thereby overcoming the 35 U.S.C. §112 rejection to that claim.

As recited in the claims, the present invention is generally directed to embodiments for custom routing of messages between computers over one or more routers. For example, claim 1 recites a method of routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system. In the method, recited in claim 1, a router receives a message that originates at the sending computing system and that needs to be delivered to the receiving

¹ Support for the amendments and new claims are found throughout the Specification, including, but not limited to, the disclosure of page 13 of the Specification as originally filed.

² Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

computer system. The message contains at least a router list portion identifying one or more routers, a destination identifier portion, and a message content portion. The router then accesses routing rules specifying how the message should be routed to the receiving computing system. At least a portion of the message is then compared to the routing rules to determine whether the router list portion of the message should be reconfigured by adding or removing routers from the router list portion of the message. The router then removes its identifier from the router list portion of the message and the message is forwarded to the router at the top of the router list portion of the message.

The remaining independent claims are closely related to claim 1. Independent claim 16 recites limitations similar to claim 1, but as a computer program product rather than a method. Independent claim 12 recites many of the limitations of claim 1, but replaces 2 acts with a step. Independent claim 14 is directed to routing the message from the perspective of the sending computing system, rather than a router. Finally, independent claim 27 recites limitation similar to claim 14, but as a computer program product.

The office action relies on at least Tsuchiya to reject every claim. Tsuchiya discloses a method for transmitting a packet via a sequence of nodes in a network. The packet contains a sequence of node identifiers and a pointer pointing to a particular node identifier. The node selects a forwarding table from a set maintained at the node. An entry in the table is referenced based on the identifier pointed to by the pointer. The packet is then transmitted to the next node indicated by the retrieved forwarding table entry.

While the cited art of Tsuchiya is generally directed to changing the routing of a packet during transmission, Tsuchiya lacks several limitations present in the amended claims. For instance, independent claims 1, 12, and 16 require that the router remove their identifier from the router list portion of the message. Tsuchiya teaches no such limitation. The office action cites col. 7, ll. 16-23 as teaching or suggesting this limitation. However, the referenced text merely describes changing the value of the pointer so that it points to a different router. The identifier still remains in the message contents. Claims 1, 12, and 16, on the other hand, require that reference to the present router be removed from the router list.

Furthermore, the Examiner cites col. 7, ll. 16-60 as teaching the limitation of an act of comparing at least a portion of the message to the routing rules to determine whether the router

list portion should be reconfigured, wherein the router adds or deletes one or more routers in the router list portion as appropriate. However, Applicant respectfully submits that the cited paragraph does not teach or suggest this limitation for at least the reason that Tsuchiya never deletes or adds a router to the router list portion of the message. Tsuchiya updates a pointer to point to a different router on the list and adds data specifying the routing level, but does not add or delete an actual router identifier. The list of router remains constant, only the pointer and the routing context field change.

Independent claims 14 and 27 were rejected using Tsuchiya in view of Waclawsky. Waclawsky teaches embodiments for configuring an Event Driven Interface and analysis its output for monitoring and controlling a data communications network. Particularly, the disclosure teaches a routing expert contained in memory outputting routing control information through a router interface to modify a routing table. This teaching is cited as purportedly teaching an act of modifying the message router list portion based on router data contained within the cached router list, wherein a router from the cached router list is added to the message router list portion or a router is deleted from the message router list portion.

While Waclawsky does teach updating a routing table, the table referenced does not correspond to the router list portion of a message. The routing table of Waclawsky exists in the hardware of the router and is responsible for the routing of messages. Waclawsky does not teach or suggest the modification of a routing table contained within the message itself. The routing table being updated in Waclawsky is akin to the cached router list disclosed in the present invention. While having a dynamically updatable cached router list as disclosed in Waclawsky is useful, it is not a part of the currently claimed invention.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time.³ However, it will be noted that many of the dependent claims even further distinguish the claims from the cited art, and for additional reasons. For example, in dependent claims 9, 11, 24, and 26, the recited embodiments each include the limitation of utilizing the message content portion to determine if the routing list portion should be reconfigured. This is neither taught nor

³ It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise

suggested by the cited art. In the office action, Col. 10, ll. 3-21 of Tsuchiya is cited as teaching this limitation. While this disclosure includes updating the routing context field of a message to control routing by causing a node to select a particular forwarding table for use in the routing, this disclosure does not teach or suggest the claimed limitation of accessing the message content portion, as the routing context field is stored in the routing portion of the message. Furthermore, the routing list is not updated by adding or deleting any routers in the message, only the node the message is forwarded to changes. For at least this reason, in addition the above arguments, Applicant respectfully submits that dependent claims 9, 11, 24, and 26 are patentability distinguishable over the cited art.

The new claims also recited additional distinctions over the cited art, wherein the data contained within the cached router list comprises routing rules based on the message content portion of the message (claim 28), wherein the data contained within the cached router list comprises routing rules based on the message content portion of the message (claim 29), wherein the message is created in a markup language and wherein the receiving computer system identifier portion is contained within metadata of the message (claim 30), and wherein the message is created in a markup language and wherein the receiving computer system identifier portion is contained within metadata of the message (claim 31).

In view of the foregoing, Applicant respectfully submits that the pending claims are in condition for immediate allowance. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

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Respectfully submitted,



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